

A Step in the Green Direction: Paved with Miles of Economic Growth and Individual Savings Support for S2252/A4819

Case Statement

Widespread adoption of electric vehicles, enabled by S2252/A4819, will be transformational for New Jersey, spurring both economic investment in our state and reducing air pollutants caused by internal combustion engines. New Jersey's investments in infrastructure and in growing the base of electric vehicles on our roads will net economic, health and environmental benefits.

The Problem

The Earth's climate is changing at an alarming rate. The earth's average surface temperature has risen approximately 1.62 degrees Fahrenheit since the late 19th century. This rise in temperature is impacting New Jersey directly, including rising sea levels, large scale flooding throughout the state, and the escalation of extreme weather events. New Jersey Shore communities will certainly face the brunt of these imminent changes, but many urban and inland communities will be impacted, as well. It is imperative that the State address this crisis with sustainable and intentional policy initiatives to arrest the pace of climate change, caused by greenhouse gas emissions.

Most significantly, *the transportation sector accounts for the largest share of polluting greenhouse gas emissions in New Jersey.* According to the latest Statewide Greenhouse Gas Emissions Inventory Report, in 2015, transportation accounted for 45.8 percent of New Jersey's greenhouse gas emissions. This includes emissions from buses, shipping trucks, rail, aircrafts, ships, and of course personal vehicles.

While the widespread use of electric vehicles will provide significant benefits to counter these trends, there are key impediments which presently hinder this transition.

Solution

It is estimated that each electric vehicle is about 70% cleaner than a petroleum-fueled vehicle. This figure takes into account the emissions related to the electric generating sources in place today. Over time, it is likely electric vehicles will run even cleaner as the energy sector shifts to renewable sources of electricity generation, like solar and wind.

For electric vehicles to be an effective solution, however, two assurances must be made to encourage consumers to switch from petroleum fueled vehicles: *addressing range anxiety* and *price concerns*. Consumers need the security of accessible and adequate charging station infrastructure, while also being offered incentives that reduce the cost and strengthen the appeal to shift to electric vehicles.

Legislation sponsored by Senator Bob Smith and Assemblyman Dan Benson (**S2252/A4819**) intends to address those two areas. The legislation aims to *create the market development necessary to accelerate the transition to electric vehicles.*

The bill specifically:

- Sets goals for increasing registered electric vehicles with benchmarks of 330,000 by 2025 and 2 million by 2035;
- Requires a set amount of charging stations;
- Establishes the “Essential Public Charging Network Initiative” supported by a cross agency working group to create the minimum number of charging stations throughout the state, along major corridors and in community locations to ensure coverage;
- Establishes a “Light Duty Plug-in Electric Vehicle Rebate Program” that would incentivize purchases of electric vehicles with rebates up to \$5,000;
- Sets requirement for a gradual electrification of NJ Transit and state-owned non-emergency light duty vehicles.

The environmental advantages to such legislation are not the only positive benefits that the bill would provide to the state. S2252/A4819 will make New Jersey a leader in clean energy transportation, which will *draw the attention of related businesses and industries to choose New Jersey as an ideal home base on the eastern seaboard.*

Savings for the average New Jersey ratepayer would be realized as well, with lower electricity costs for everyone that buys electricity in our state. That is because the more electricity we use, the lower the fixed costs to maintain our grid for everyone.

There are also significant savings on operations and maintenance for users of electric vehicles. On average, it costs 12 cents per mile with petroleum fueled vehicles compared to the 4 cents per mile with electric vehicles, along with fewer parts to repair. *A recent study by ChargeVC estimated that consumers would see a savings of \$936 million per year for a total of \$16 billion by 2035.* That is money going straight back into consumer’s pocketbooks.

Summary: Support for S2252/A4819 will create economic, health and environmental benefits by investments in infrastructure and in growing the base of electric vehicles on our roads.

Sponsors: Senator Smith, Senator Greenstein, Senator Bateman, Senator Diegnan, Senator Gopal, Senator Gill, Senator Andrzejczak, Senator Turner, Assemblyman Benson, Assemblywoman Pinkin, Assemblyman Kennedy, Assemblyman Karabinchak, Assemblywoman Lopez, Assemblywoman Jones, Assemblywoman Carter, Assemblyman Holley, Assemblyman DeAngelo, Assemblyman Land